DEPARTMENT OF THE ARMY HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND FORT MONROE VIRGINA 23651-5000



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MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Simulation Support Plan (SSP)

1. References:

- a. Memorandum, HQ TRADOC, ATCD-ZC, 24 Apr 02, subject: Development and Approval of Army Warfighting Requirements.
- b. Memorandum, HQ TRADOC, ATCD-ZC, 31 May 02, subject: Development and Approval of Army Warfighting Requirements.
- 2. This memorandum supplements the memorandum at reference la. It is the second of what is expected to become a series of brief SSP policy updates as we continue to refine the process of developing and implementing SSPs.
- 3. <u>SSP Requirement</u>. An approved SSP must accompany each Operational Requirements Document (ORD), as per reference 1b.

4. SSP Overview.

- a. <u>General</u>. The SSP identifies how Modeling and Simulation (M&S) tools support the overall development of a system. It is the key document for implementing The Army's Simulation and Modeling for Acquisition, Requirements and Training (SMART) initiative. The Integrated Concept Team (ICT) that develops the ORD will develop the initial SSP--establishing the M&S foundation. Upon program initiation, responsibility for the SSP transitions to the Program Manager--who expands and refines the SSP as the system matures.
- b. Roadmap/Foundation. The aim of the SSP is to produce a simulation roadmap that depicts the "how and when" M&S tools are integrated, utilized and transitioned in the course of concept exploration and system development. Planning is necessary to answer the following types of questions: How do I get there? When do I do it? How much will it cost me? The

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initial SSP establishes the <u>foundation</u> for this <u>roadmap</u> as described and prioritized below.

c. <u>Initial SSP Priorities</u>. The initial SSP addresses all areas of the format (described below in paragraph 6); however, it provides a level of detail appropriate for the point in the lifecycle (for example, as a minimum, the initial SSP must include the description of the system and simulation approach/strategy and rationale). While each area of the format is addressed, emphasis on detail in the initial SSP is prioritized as follows: Priority 1, Description of the System (Authoritative Representation described below in paragraph 7), and Priority 2, Simulation Approach/Strategy and Rationale (described below in paragraph 8).

5. SSP Review and Approval.

- a. The initial SSP is developed with the ORD and will accompany the ORD during staffing and approval.
- b. The Deputy Chief of Staff for Simulations and Analysis (DCSSA) will separately staff the SSP with the "M&S community."
- c. DCSSA will provide the HQ TRADOC coordination "chop" of the initial SSP prior to forwarding the ORD package for approval.
- d. The initial SSP will be approved with the approval of the ORD.
- 6. <u>SSP Format</u>. The current SSP format is available at the TRADOC DCSSA website. General categories of information required in the SSP include the following:
 - a. General.
 - b. Executive Summary.
 - c. System Description.
 - d. Program Acquisition Strategy.
 - e. Simulation Approach/Strategy and Rationale.

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7. System Description in the SSP.

- a. <u>Authoritative Representation</u>. The first priority in developing an SSP is to adequately describe the system requirements/capabilities. This is referred to as the "Authoritative Representation."
- b. <u>Purpose</u>. The purpose of the Authoritative Representation is twofold:
- (1) To organize information about the system in a standard way that supports export into models and simulations of all domains.
- (2) To establish, from conception, a permanent data repository (one source) for the system that is maintained and further developed throughout the system's lifecycle.
- c. <u>Structure</u>. The general structure of the Authoritative Representation includes the three categories of data listed below. This data is derived from the ORD, most notably from paragraphs 1, 4, 5, and 7. A more detailed template of Authoritative Representation data fields will be posted on the DCSSA website.
- (1) Performance (reliability, survivability, speed, lethality, and size).
 - (2) Behavior (individual and organizational TTP).
- (3) Environment (scenario, terrain, force structure, and weather).
- d. <u>Growth</u>. As the system itself matures, the data describing the system also matures and grows. The Authoritative Representation becomes progressively more detailed and more accurate (e.g., because of feedback from simulation during initial stages). (Note: Changes to the ORD require coordination with the combat developer.)
- e. <u>Maintenance and Ownership</u>. The initial Authoritative Representation is established by the ICT. Upon program

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initiation, ownership and maintenance of the Authoritative Representation are transferred to the Program Manager.

- f. <u>Location/Access</u>. The Authoritative Representation will be accessible to Army M&S developers and users.
- g. $\underline{\text{Review}}$. As a component of the ORD SSP, the Authoritative Representation is reviewed as part of the ORD review process.
- 8. <u>Simulation Approach/Strategy and Rationale</u>. The second priority in developing an initial SSP is to develop the Simulation Approach/Strategy. For the initial SSP, the task is to map M&S applications to program needs. This is done (<u>with assistance from ICT members</u>) through the two steps described below:
- a. <u>Step One-Issue Identification</u>. Identify the issues, questions, decisions, and information that could be supported by the use of M&S. For the initial SSP, this step is more important than Step Two that follows. This step leverages ICT knowledge of the required system by capturing all key issues in a format that supports subsequent mapping to M&S.
- b. <u>Step Two-M&S Mapping</u>. Harness the expertise of the ICT to identify candidate M&S and correlate ("map") them with the issues, questions, etc. identified in Step One. This "mapping" is captured through a table or spreadsheet that portrays these issues by program phase, and designates M&S that will be used to address each one. Keep in mind that this is the initial attempt to map M&S applications to program needs, so many of the M&S cells might be empty; however, it provides a foundation for the Program Manager to further develop the M&S roadmap.
- 9. <u>SSP Websites</u>. Additional information about the SSP is available at the following websites:
 - a. TP 71-9 is on the DCSDEV website: http://www.tradoc.army.mil/dcscd/71-9%202001%20draft.htm

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- b. Current information related to SSP development, process/procedures and reviews is available on the TRADOC DCSSA website: http://www.tradoc.army.mil/dcssa/SSP.htm
 - c. SSP Format:

http://www.tradoc.army.mil/dcssa/Briefings/SSP%20checklist.ppt

d. Planning guidelines for SMART contain additional
information and can be found on the Army Modeling and
Simulation Office (AMSO) website:
http://www.amso.army.mil/main.htm

10. POC is Mr. Scott Callender, (757) 788-2823, Callendersd@ Monroe.army.mil. DCSSA POC for SSP assistance is Ms. Angela Winter, (757) 788-5832, Angela.Winter @Monroe.army.mil.

/signed/
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for Developments

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